

## Today's Topics:

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Wondering about 455 kHz (2 msgs)

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Date: 27 Oct 89 20:29:32 GMT

From: att!cbnewsc!berman@ucbvax.Berkeley.EDU (a.scott.berman)

Subject: 89 Supplement...Help

Could someone with a 89 Callbook Supplement send the name and address of WV0P.... I made my long sought first Nebraska contact last night only to find him not in the 89 Callbook.

Many thanks      Send to att!ihlpl!berman

Scott Berman    WD9EMZ

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Date: 26 Oct 89 20:40:00 GMT

From: uokmax!occrsh!occrsh.ATT.COM!QAOKIS.UUCP!gwl@apple.com

Subject: Aircraft headsets

Ripoff Shack has those mikes for about \$3.00.

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Date: 27 Oct 89 22:27:26 GMT

From: zephyr.ens.tek.com!vice!georgep@uunet.uu.net (George Pell)

Subject: Aviation NAVAIDS (long, lonter now)

In article <232@pmday\_2..Dayton.NCR.COM> steve@pmday\_2.Dayton.NCR.COM (Steve Bridges) writes:

+In article <8910260703.AA00903@ucbvax.Berkeley.EDU> MEHARP01@ULKYVM.BITNET

(Michael Harpe) writes:

+>

+>Aviation NAVAIDS are some of the slicker applications of radio

+>technology that you will ever find.....

+>

+>VOR - Stands for VHF Omni Ranging (I think). System uses a ground-based

+>transmitter that sends a phase encoded signal that looks like a "radio

+>compass" to the receiver.....

+

+Actually, the VOR transmitter has a rotating beacon that rotates through

+360 degrees and somehow encodes the bearing into the signal. The receiver

+in the aircraft decodes this and indicates through the OBS (Omni-bearing

+selector) indicator how far left or right of the selected radial you are.

+.....

The VOR sends out two signals, one is a reference sin wave FM modulated on the carrier, The other is an electronically swept AM signal. When the two signals are in phase, the AM signal is sweeping magnetic north.

The receiver compares the phase of the two signals, compares that to the desired 'radial' as set by the OBS, and indicates a 'fly left' or 'fly right' via a meter movement.

Some receivers (such as my handheld) will read out directly the radial it is receiving.

geo

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Date: 20 Oct 89 22:25:28 GMT

From: psuvm!auvm!redelman@psuvax1.cs.psu.edu (Richard B. Edelman)

Subject: Cellular Telephone Info

Can anyone recommend a good >>technical<< reference on how the cellular telephone network operates?

Thanks,

Richard Edelman, KH6RE

REDELMAN@AUVM.BITNET

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Date: 27 Oct 89 14:41:59 GMT

From: asuvax!anasaz!john@handies.ucar.edu (John Moore)

Subject: DIRECTION FINDING EQUIPMENT (SuperDF)

In article <2241@mmsac.UUCP> jim@mmsac.UUCP (Jim Lips Earl) writes:

]

]Just how much does this SuperDF thingamabob cost? I love going on T-Hunts.

Funny you should ask. I just ordered one yesterday. The kit costs were:

Control Unit SDC2-K 135.60

100-260Mhz Antenna SDV1-FRK 57.75

250-500Mhz Antenna SDU1-FRK?? 49.50

Shipping and Handling: 7.50

>From BMG Engineering

9935 Garibaldi

Temple City, CA 91780

]I've seen those doppler units in Mobile Radio Tech., but I've yet to see a  
]price. How much are we talking about here? The cheapest one I'd seen was

Many hundreds to thousands.

]a kit from Dick Smith. I don't even know if they make them anymore.

They do. You don't want it! You should buy a copy of Joe Moell's  
book on T-hunting (HRO carries it).

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John Moore (NJ7E) mcdphx!anasaz!john asuvax!anasaz!john

(602) 861-7607 (day or eve) long palladium, short petroleum

7525 Clearwater Pkwy, Scottsdale, AZ 85253

The 2nd amendment is about military weapons, NOT JUST hunting weapons!

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Date: 27 Oct 89 14:09:58 GMT

From: texbell!swbatl!uusgta@rutgers.edu (4237)

Subject: John F. Rider Publishing

Any vacuum tube era radio repair people out here? I have some questions.

I have a fair number of books in my collection from the John F. Rider  
publishing company. Many, perhaps most, of these books are by John F. Rider,  
especially during the 30's. Is anyone familiar with this publishing company  
and it's history? Is it still in existence? I know that John Rider was born  
in 1900. Is he still alive? Anyone met him personally?

How in the world did he manage to write so many books in such a short time?

How were Rider publications perceived as compared to Sam's and Audel?

What were the typical references used for repair work? For education?

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# ---Tom Adams--- | uunet!swbatl!uusgta or uusgta@swbatl.swbt.com

# I collect pre-1930 wireless, electrical and scientific books.

# opinions... Opinions? I don't think I'm allowed to have opinions.

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Date: 26 Oct 89 15:54:57 GMT  
From: gem.mps.ohio-state.edu!samsung!shadooby!mailrus!jarvis.csri.toronto.edu!  
utgpu!utzoo!mnetor!ghp!jim@tut.cis.ohio-state.edu (Jim Stewart)  
Subject: Need Help/Schematic with Kenwood MC-46 Microphone

I just bought a 2 metre Kenwood from a friend. Part of the deal was an MC-46 microphone, this one has a pre-amp and touch tone pad. Although it was working, now the voice half of things no longer works (i.e., I can get tones out, but nobody can hear my voice). My first guess is in the pre-amp.

Although the pre-amp is small, a schematic would be very helpful (the transistors have stange markings of course). I have the service manual for the rig, but it doesn't have anything for this mic.

Can anybody help me out, either with suggestions or the schematic?

tnx

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Jim Stewart, VE3SRJ  
UUCP: jim%ghp@mnetor.uucp  
BELL: (416)862-0430

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Date: 27 Oct 89 22:14:33 GMT  
From: zephyr.ens.tek.com!vice!georgep@uunet.uu.net (George Pell)  
Subject: Over-the-horizon Radar (was Re: Radar)

In article <5992@merlin.usc.edu> eickmeyer@girtab.usc.edu (Biff Henderson) writes:  
+I toured Grand Forks Air Force Base outside Grand Forks, North Dakota,  
+over the summer, and they told us that a top priority project is building  
+an over-the-horizon radar system. I don't know anything about the  
+status of the construction (i.e. just dreaming or actually building)....

The receiving portion of this radar is under construction in Christmas Valley, Oregon. Construction is proceeding.

geo

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Date: 28 Oct 89 01:17:27 GMT

From: hpl-opus!hpnmdla!alanb@hplabs.hp.com (Alan Bloom)  
Subject: pre-novice seeking equipment advice

Building your own rig is great, but it's not a good idea to depend on that for your first radio. I would recommend you buy a good used set (the old tube units are quite reasonable nowadays). This way, you can get on the air and OPERATE while you build. Later you can sell the used rig and get most of your money back. By then you will know what kind of features/performance you want and can make a wise choice in selecting new equipment.

Al N1AL  
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Date: 27 Oct 89 19:53:21 GMT  
From: att!cbnewsc!parnass@ucbvax.Berkeley.EDU (Bob Parnass, AJ9S)  
Subject: Some new federal frequency allocations

Federal frequency information has been difficult to get since the entire Government Master File (GMF) was redeclared "classified" during the last presidential administration.

Now, hobbyists must "piece together" tidbits of information gathered from all sorts of unclassified sources.

Here are some new federal frequency allocations I read about in the February 14, 1989 (unclassified) publication:

"Manual of Regulation and Procedures for Federal Radio  
Frequency Management. May 1986 Edition. Revisions for  
January 1989" PB89-193791

US: all agencies, intermittent wide area transient operations		
	[USA-wide]_____	163.1000____call? (govt recds)
"	"	418.0500____call? (govt recds)
"	"	418.5750____call? (govt recds)
US: all agencies, common		
	[USA-wide]_____	163.3500____call? (govt recds)
"	"	408.4000____call? (govt recds)
"	"	418.0750____call? (govt recds)

The paper also lists the frequencies and locations of some US Government transmitting and receiving earth stations in

the 1761 and 8025 MHz ranges. These are operated by USAF,  
NASA, or Commerce.

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Bob Parnass, AJ9S - AT&T Bell Laboratories - att!ihuxz!parnass (312)979-5414

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Date: 26 Oct 89 19:30:21 GMT  
From: hpfcso!hpfcbig!rickt@hplabs.hp.com (Rick Turley)  
Subject: Uniden HR-2510 on CB ?

Does anyone know what conversions are possible for the Uniden HR2510 so that it can handle 11M (CB) activity as well as its 10M capability? I think I saw some note about this many months ago. I presume that I have the "potted" electronics vintage rig.

Please e-mail me any info you might have.

Thanks,  
Rick Turley / WB2CFK  
rickt@hpfcslp.sde.hp.com

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Date: 26 Oct 89 19:22:12 GMT  
From: hpfcso!hpfcbig!rickt@hplabs.hp.com (Rick Turley)  
Subject: Uniden President HR-2600 - info request

/ hpfcbig:rec.ham-radio / kawai@csl.stanford.edu (Goh Kawai) / 11:47 pm Oct 7, 1989 /

Does anybody have experience with the Uniden President HR-2600 all mode 10 meter mobile rig? I'm thinking about this one, and would appreciate any info on this. Thanks.

>goh< (kawai@csl.stanford.edu [arpanet]) n6uok

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I don't know about this one but the HR-2510 is a great rig!

Rick Turley

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Date: 27 Oct 89 14:38:42 GMT  
From: asuvax!anasaz!john@handies.ucar.edu (John Moore)  
Subject: Where do YOU buy parts?

In article <966@holler.UUCP> gbishop@sun.com writes:

]Is there some secret to parts acquisition that I have missed? Do some  
]of you know of distributors who are willing to sell to individuals in  
]small quantities? It is frustrating to find the perfect part in a  
]data book but not be able to buy it for lack of a source.

I am a part-time manufacturer of repeater controllers (True Value Software  
TVS-701). I have accounts with many distributors, and they all allow  
me to buy in unit quantities.

If you are buying specialty parts a lot, it may be worth it to set  
up an account with them. You may need to set up a business (which  
can be simply a business checking account, and a business name  
with your name in it so you don't have to file fictitious name  
statements). Once you have done that, as far as the distributors are  
concerned you are a business and they will sell to you, and even set  
up accounts. I set up True Value Software as a business years before  
I had any products just so I could do things like that.

--

John Moore (NJ7E)                    mcdphx!anasaz!john asuvax!anasaz!john  
(602) 861-7607 (day or eve) long palladium, short petroleum  
7525 Clearwater Pkwy, Scottsdale, AZ 85253

The 2nd amendment is about military weapons, NOT JUST hunting weapons!

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Date: 27 Oct 89 16:22:14 GMT

From: hp-pcd!hplsla!tomb@hplabs.hp.com (Tom Bruhns)

Subject: Where do YOU buy parts?

>Though I have catalogs for all of the following:

>

> All Electronics

> Amidon Associates

...

>

>I \*OFTEN\* cannot find the parts I want. These include linear and  
>digital IC's, transistors, hybrids, mixers, etc. It is frustrating to  
>find the perfect part in a data book but not be able to buy it for  
>lack of a source.

Another to add to your list: Active Electronics. Headquarters is  
in Boston area, I believe. Some places like Active and Newark have  
more than is in their catalog; Active tends to cater more to  
hobbyists.

MiniCircuits Labs has packaged mixers, MMIC's, and a narrow range  
of associated items. They have minimums, but if you do a lot of

that sort of experimenting, consider their "kits" of assorted parts. Lately they have been pushing MMIC kits, and will also sell you chip capacitors.

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Date: 27 Oct 89 15:41:30 GMT  
From: hpfcso!hpfcmgw!music@hplabs.hp.com (John Wells)  
Subject: Wondering about 455 kHz

/ hpfcmgw:rec.ham-radio / jpb@ATHENA.MIT.EDU / 3:00 pm Oct 23, 1989 /

Does anyone out there know how 455 kHz got to be such a popular IF ?  
Why 455, (as opposed to 450 or 500, e.g.)?

Just curious.

73 de ka1rcv --- John Paul Braud (jpb@athena.mit.edu)  
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In the olden days when the first single conversion AM broadcast radios were designed, 455Khz was chosen because the band width of the AM band was such that there was little problem with images from within the AM band. This allowed manufacturers to build receivers with little or no front end tuning. (455khz\*2 = 910 khz, which is a fair compromise, the "Q" of the tuned RF section would be sufficient to keep images reasonably down in the noise floor).

This same engineering mentality holds true for the early FM broadcast radios, 10.7 mhz was outside the FM broadcast bandwidth, hence little or no image problem.

John Wells (supposed to be wisdom of the aincients)  
WA0LHB in Ft. Fun, Coloradio

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Date: 27 Oct 89 16:21:10 GMT  
From: cca.ucsf.edu!pasteur!agate!shelby!polya!Neon.Stanford.EDU!  
kaufman@cgl.ucsf.edu (Marc T. Kaufman)  
Subject: Wondering about 455 kHz

In article <5147@cps3xx.UUCP> hendrick@frith.UUCP (Kenneth J. Hendrickson) writes:  
>Jim.Grubs@f1.n234.z1.fidonet.org (Jim Grubs) writes:  
-> > From: jpb@ATHENA.MIT.EDU  
-> > Does anyone out there know how 455 kHz got to be such a popular IF ?  
-> > Why 455, (as opposed to 450 or 500, e.g.)?  
->So broadcast band images would not fall inside the band.



.Lets see now. If the L0 is above the frequency to be received, and we  
.are listing to 540 kHz, the L0 must be at  $540 + 455 = 995$  kHz.  
.Therefore the image to be worried about is  $995 + 455 = 1450$  kHz. That's  
.in the BC band...

.It seems to me that for quite a significant range of frequencies, the  
.image \_will\_ fall inside the AM BC band. I doubt that's the reason that  
.455 was chosen.

For an IF of 455 (as opposed to 450 or 460), the L0 will fall \*BETWEEN\*  
stations, rather than on top of them. This would reduce interference to other  
receivers, and would eliminate images of signals with respect to  $2*L0$ , since  
 $2*L0 \pm 455$  is not a multiple of 10Kc (we used Kc in those days).

Marc Kaufman (kaufman@Neon.stanford.edu)

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End of INFO-HAMS Digest V89 Issue #816

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